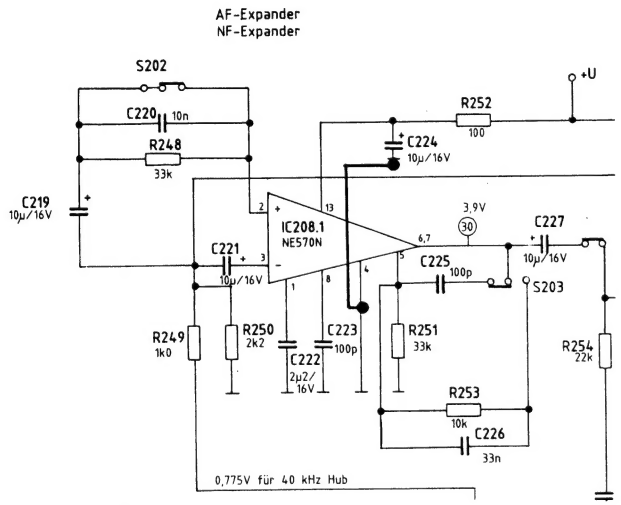
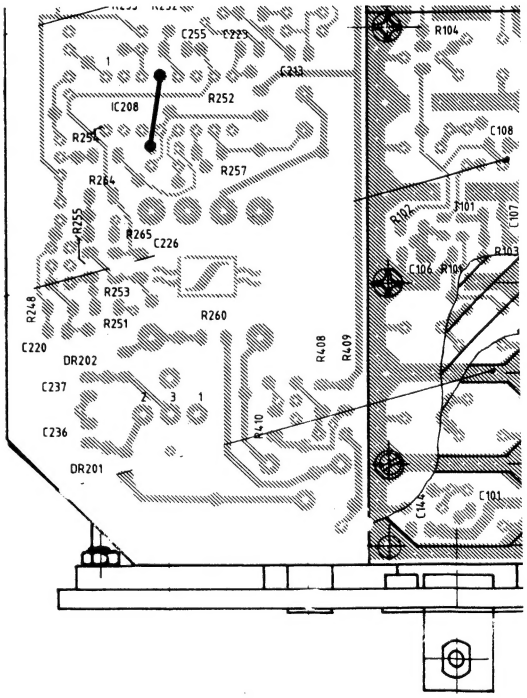
SENNHEISER
Service

si 881219-14 e

Ref.:	EM 2003 TV
Fault:	50 Hz hum when the EM 2003 TV receives an RF-carrier without modulation.
Cause:	Insufficient ground connection at HiDyn-IC
Remedy:	Connect ground connection of IC 208.1 to ground connection of IC 224. This will reduce the hum by 6 dB.





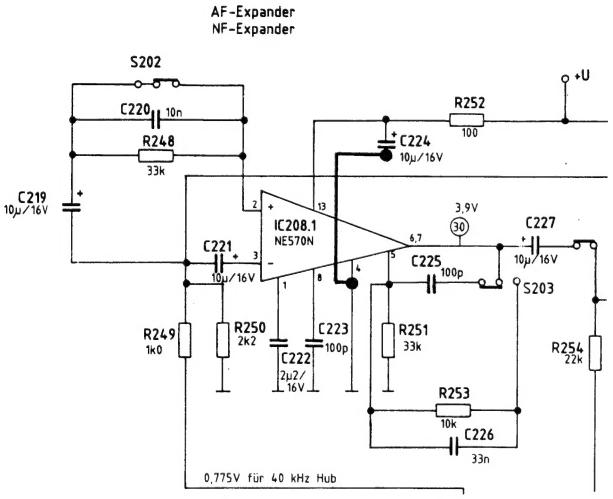
SENNHEISER

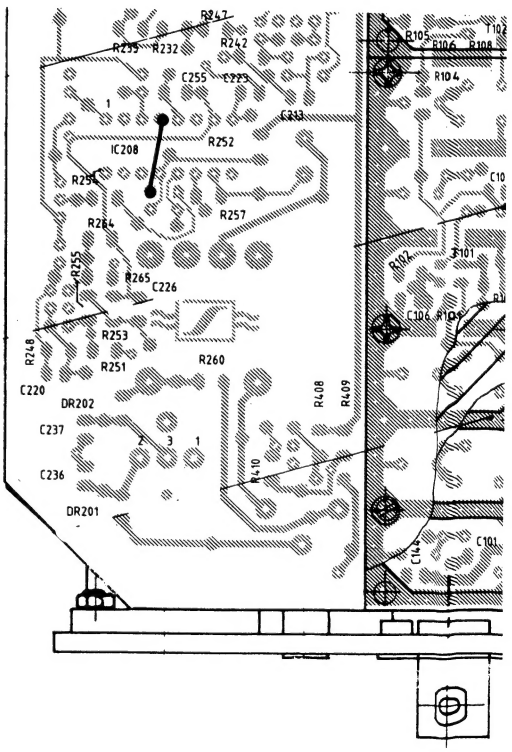
Service

19

si 881219-14

Betr.:	**EM 2003 TV**
Fehler:	50 Hz-Brummen bei Empfang eines unmodulierten HF-Trägers
Ursache:	Unzureichende Masseverbindung am HiDyn-IC
Abhilfe:	Massebrücke zwischen C 224 und Pin 4 / IC 208.1 auf Lötseite einbauen. Dadurch wird eine Verringerung des Brummens um 6 dB erreicht.





Vorstufe
RF-Pre-Amplifier

Mixer

ZF Verstärker
IF Amplifier

ZF Verstärker-Demodulator
IF Amplifier-Demodulator

NF Verstärker
AF Amplifier

Expander

NF Endstufe
AF Amplifier

Oscillator

Squelch Comparator

Diversity-Comparator

Elektr.-Electronic-Schalter Switch

Spannungswandler Voltage-Converter

Diversity/Squelch-Indicator

Pegel-Anzeige Dev./AF-Indicator

	1	2	3	4,101	102	103	5,6	7	8,9,11	10,104,105	106	111,110,112	113	119	215	116,117	118	120	121	122	124	125,126	128,127	40	41	42	43	44	45	46	47	48	49	50,53	51	
				201	202	61,64,203		62,63	65	204,205		211,210,212	213	219	115	216,217	218	220	15,16,17,18	221	222	19,20,21,22,23,24	224,225,226,227,228,229		30,31,301,302,303		32,33,304,305		35,36	104	37		38		310,308,311,309,312		R
101	102	103,104,1	105,2	3	106,107,4,5,109,8	108	110,7,8,111	112	9	10	113	114	115	116	120,121		124	123	125	126,133,134	130,134,135,137	139	140,141	142	143,144		30,31,32,34		33	35	36	38,39,44		40,41,42,43		
201	52,202	48,49,53,203,204,54,50,51,205			55,206,207	209,56,208	210	211,57,212			213	214	215		220,221		224	223	225	226,233,234	230,234,235,237	239	240,241	242	18,243,244	19,20,21	22	23,24		25,26		27				C

BC 1
BD 544 A

BF 240

BC 548

BF 981
top view

TAA 861A

TBA 820 M
LM 358 N
NE 5534 N
S 761 T

NE 570 N
UAA 170
DG 243 C

UAA 3576

EM 2003
EM 2003 R

Typ EM2003F9

Vorstufe
RF-Pre-Amplifier

Mixer

ZF Verstärker
IF Amplifier

ZF Verstärker+Demodulator
IF Amplifier+Demodulator

NF Vorverstärker
AF Amplifier

Expander

NF Endstufe
AF Amplifier

Oscillator

Multiplier

Squelch Comparator

Diversity-Comparator

Elektr. Schalter
Electronic-Switch

Spannungswandler
Voltage-Convertor

Diversity-Squelch Indicator

Pegel-Anzeige
Div./AF-Indicator

Netz

R	11	7	8	101	102	10	103		10,104,105	106		111,110,112	113	119	216,117	118	120		122	124	125,126	128,127		40	41	42	43	44	45	46	47	48	49	50	51	
C	101	102		103,104,	6	105,7,8	9,10	106,107,	81,84,203	62,83,85	204,205	113	114	115	116	211,210,212	213	219	218,217	218	220	15,16,17,18	222	19,20,21,22,23,24,224,25,26,225,226,227,228,227,28,29		30,31,301,302,303		32,33,304,305		35,36		306	37	30		310,308,311,309,312
	201	52,202		48,49,53,203,204,54,50,51,205			95,206,207		209,56,208	210	211,57,212	213	214	215	216	220,221,222			227	224	223	225	226,233,234		238,236,235,237		239		240,241	242	18,243,244	19,20,21		22	23,24	25,26		27	38,39,44		40,41,42,43

BC 548

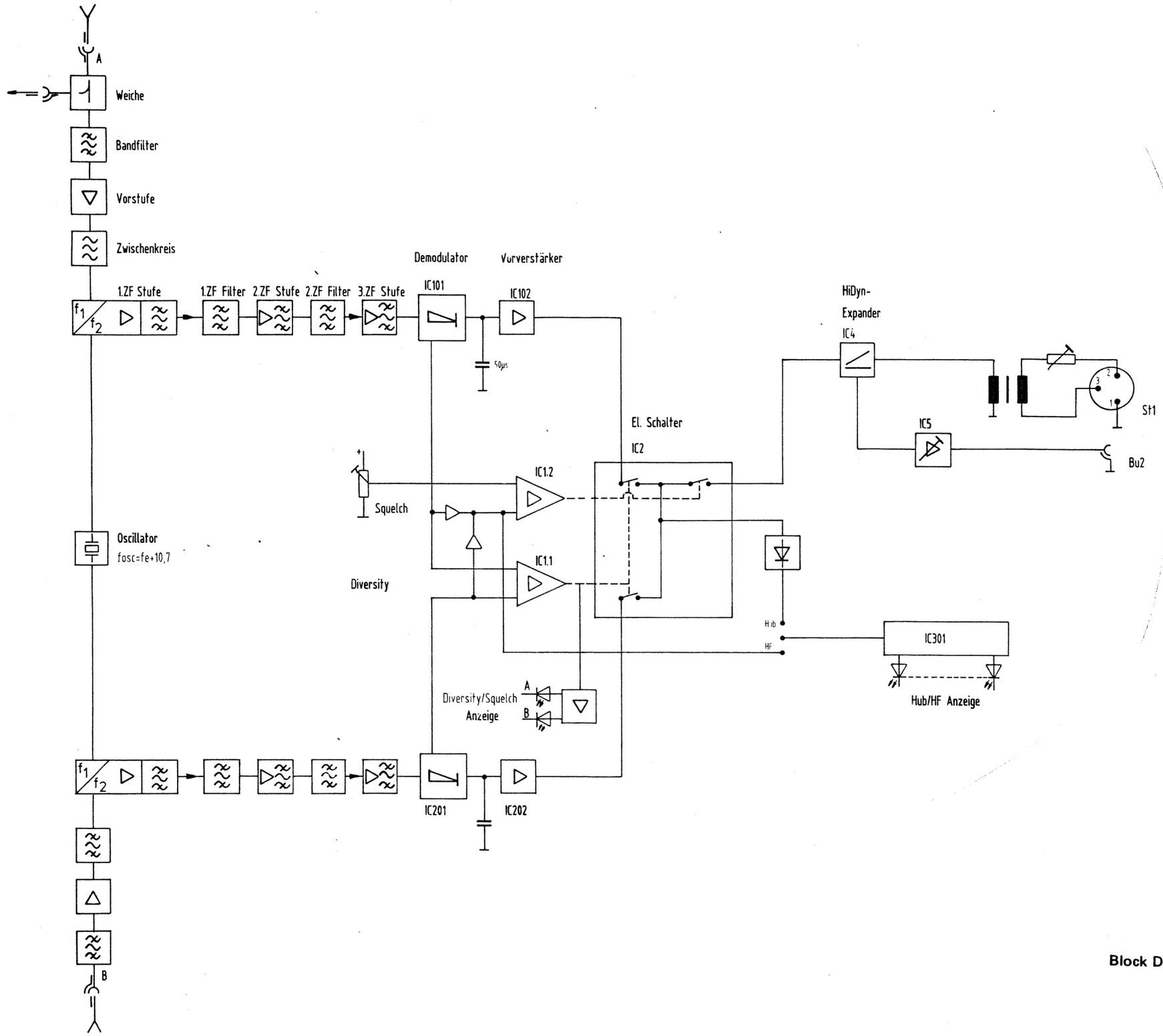
BF 960
top view

TAA 861A

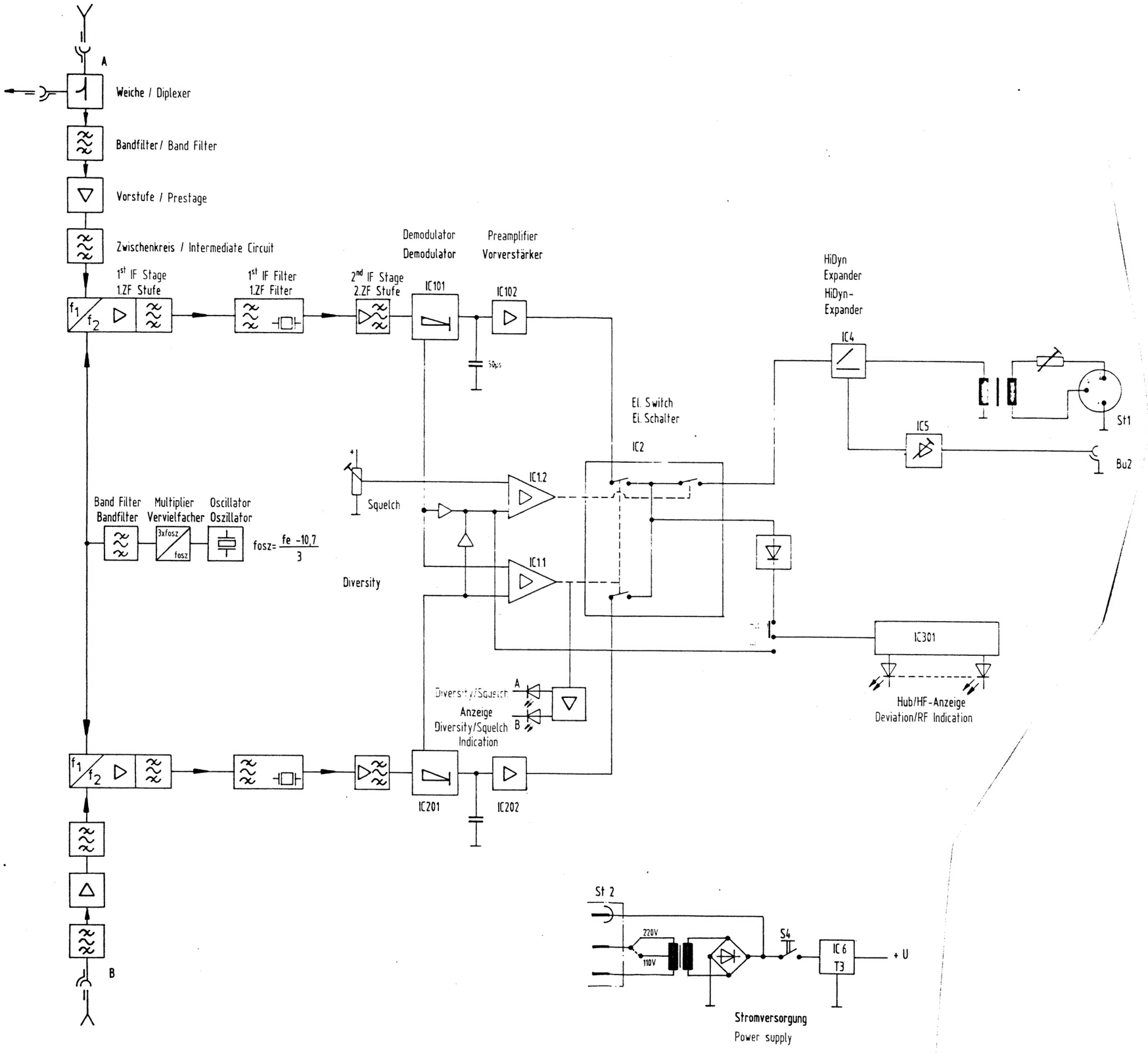
TBA 820 M
LM 358 N
NE 5534 N
SI 7661

NE 570 N
UAA 170
DG 243C/J

TDA 1576



Block Diagram EM 2003



Block Diagram EM 2003-9